

## Introduction: Romanian-Finnish Seminars along the years

The idea of organizing a Finnish-Romanian cooperation in Complex Analysis came from Professor Simion Stoilow and was based on his deep friendship with Professor Rolf Nevanlinna. A testimony may be found even in the Preface to the Proceedings of the third Romanian-Finnish Seminar, Lecture Notes in Math. **743**, Springer-Verlag, 1979:

"During an International meeting in Helsinki 1957, Professor Stoilow, the wellknown founder of the romanian school of topology and function theory, first proposed to establish a cooperation between the Romanian and the Finnish mathematicians."

About the friendship between these great mathematicians spoke Professor Olli Lehto in his lecture at the fifth Romanian-Finnish Seminar, published in the Proceedings of the Seminar, Lecture Notes in Mathematics **1013**, Springer-Verlag, 1983, p.2:

"Professor Stoilow visited Finland once, in 1957, attending our first post-war international colloquium on the theory of functions. As the secretary of this colloquium, I was invited to a small dinner party with Nevanlinna as the host. This gave me the opportunity to make the acquaintance of Professor and Mrs. Stoilow and to see myself the mutual respect and affection between Nevanlinna and Stoilow. Like Nevanlinna, Stoilow radiated some inexplicable personal charm; to me at least he made an unforgettable impression during the few days I saw him in Helsinki".

The idea to organize Romanian-Finnish Seminars was carried out through the visits of Professor Olli Lehto (1967) and Rolf Nevanlinna (1968) at the Institute of Mathematics of the Romanian Academy in Bucharest and with the full support of the President of the Romanian Academy, Professor Miron Nicolescu.

The first of these Seminars took place in Braşov, August 1969, and enjoyed a brilliant participation: Lars V. Ahlfors, Frederick W. Gehring, Friedrich Huckemann, Sin Hitotumatu, Susan Kahramaner, John Mc Millan, Edgar Reich, Heinz Renggli, Hasley L. Royden, Uri Srebro, David Storvick, Kurt Strebel, Georges G. Weill. The Finnish group led by Olli Lehto included young and very gifted mathematicians: Tapani Kuusalo, Olli Martio, Raimo Näkki, Seppo Rickman. The Seminar had a great Romanian audience; Prof. Octav Onicescu, Petru Caraman and Cabiria Andreian Cazacu delivered lectures. The importance of this Seminar is illustrated, for instance by Rickman's and Martio's lectures on their quasiregular mapping theory in  $\mathbb{R}^n$ ,  $n \geq 3$  (developed together with Jussi Väisälä). It was one of the first presentation of this now classical achievement, very new at that moment (the first article appeared in *Annales Academiae Fennicae* 1969). The Seminar Proceedings formed a volume, published by The Publishing House of the Romanian Academy in 1971.

The II<sup>nd</sup> Seminar, Jyväskylä (1973), was organized due to the deep involvement of Professor Ilppo Simo Louhivaara, together with the Finnish Colloquium on Mathematical Analysis, where as usual gathered the most important mathematicians working in the field. This Seminar was preceded by a fruitful meeting at the University of Joensuu, organized by Professor Ilpo Laine, who (after a longer stage at the Mathematical Institute of the

Romanian Academy in Bucharest) was in close relation with Stoilow's school, especially with Nicu Boboc, Cornel Constantinescu and Aurel Cornea.

In 1976 the IIIrd Seminar was organized in Bucharest by the Institute of Mathematics and the University with a long list of very distinguished mathematicians. This time the whole Stoilow's school participated, the Seminar obtaining its present structure with five sections, taking into account quasiconformality, analytic functions of one respectively several variables, potential theory, relations with functional analysis. The proceedings has been published by Springer-Verlag in the Lecture Notes in Mathematics series, vol. 743 (1979).

In 1978 the International Congress of Mathematicians took place in Helsinki, presided by Professor O. Lehto and Professor R. Nevanlinna being elected Honorary President of the Congress. A large Romanian delegation from all mathematical domains participated. Following the Congress, Professors Ilpo Laine, Olli Lehto, Tuomas Sorvali organized the Colloquium on Complex Analysis in Joensuu, including also the IVth Romanian-Finnish Seminar. This time the proceedings was published as volume 747 in Lecture Notes in Mathematics, Springer-Verlag (1979).

The Vth Seminar, Bucharest 1981, continued with success the previous ones enjoying a remarkable Finnish and international participation. Its numerous papers were reunited in two volumes, 1013 and 1014, of Lecture Notes in Mathematics, Springer-Verlag (1983).

This Seminar was dedicated to the memory of Professors Rolf Nevanlinna and Simion Stoilow. We quote from O. Lehto's lecture, vol. 1013, p.1:

"For us, both these great mathematicians are immortal. They have introduced into mathematics completely new ideas, from which they themselves and later many others have developed extensive theories. These theories are current mathematics even today and seem still to be expanding and branching off to new fields of mathematics. [...] The warm relations between these schools, of which our joint Seminars are a striking example, go back to the personal friendship between Stoilow and Nevanlinna. They both entered the forefront of complex analysis in the 1920's. Soon their mathematical interests largely agreed, when Riemann surfaces were approached by Stoilow by way of his interior transformations and by Nevanlinna through his value distribution theory. I have been unable to find out with certainty when the two met for the first time. At least they met at the International Congress of Mathematicians in Bologna in 1928, and throughout the thirties and early forties they were in mathematical contact.

In October 1942, Nevanlinna received the degree of honorary doctor at the University of Bucharest, no doubt at the initiative of Stoilow. Among the eight universities that granted Nevanlinna an honorary doctorate, Bucharest was chronologically the second. I know from several utterances of Nevanlinna that he appreciated this distinction very much."

Then followed for Romania the years of travelling restriction. The next Seminar was to be in Finland. We were invited to organize it in the same time with Rolf Nevanlinna Colloquium 1983 and 1987 but only two Romanian mathematicians could participate. Thus the VIth Seminar had to be organized Romania, in Juin 1989 (in Bucharest), with a large international participation again.

Starting with this edition the proceedings of the Seminars have been published in

the journals of The Romanian Academy: *Revue Roumaine de Mathématiques Pures et Appliquées*, *Mathematical Reports* and *Mathematica* (Cluj-Napoca).

The VIIth Seminar, Timisoara 1993, had the same high level and good participation. It was also an opportunity to emphasize the results obtained in the direction of functional analysis.

Iassy was the center choosen for the VIIIth Seminar in 1998, continuing the traditions of previous Seminars. It was a good opportunity to organize a nice excursion to the well known Moldavian monasteries Voroneț, Moldovița, Sucevița. The Seminar prpceedings, appearing in 2000, was dedicated to the 70th anniversary of Professor Petru Caraman (from Iassy "Octav Mayer" Institute of Mathematics of the Romanian Academy) one of the founders of quasiconformality in  $n$ -space and then on manifolds and other spaces.

The IXth Seminar carried on at the Transilvania University in Brașov, in 2001, together with The Summer School "Connections between Potential Theory, Geometry and Probability", with lectures delivered by Aurel Cornea, Karl-Theodor Sturm, Lucian Beznea, Nicu Boboc, Gheorghe Bucur. Full support was given by the Rector Sergiu T. Chiriacescu and the board of the Transilvania University, by the local organizing Committee especially by Professor Nicolae N. Pascu who succeeded to found at this University a strong research group on univalent function theory, a significant part of Professor Petru T. Mocanu's school.

Sadely Professor N.N. Pascu passed away in 2004 and we express here also our deep compassion and regret for this great loss of the Romanian mathematics.

Let us mention that at this Seminar Professor Olli Martio, who contributed very much to the organization of the last editions, was awarded the title of Honorary Professor of Transilvania University, for his important mathematical work and the constant support to the Romanian-Finnish cooperation.

The present Xth Seminar is hosted by the "Babeș-Bolyai" University of Cluj-Napoca. The first Section reunites all the lectures concerning one complex variable (in the previous Seminars distributed in subsections), among which is perceived that on univalent functions from P.T. Mocanu's school. As one can see from the program, the Seminar has a valuable participation and we remark Romanian mathematicians working or still studying abroad. This Xth Seminar is also a special occasion to render homage to Professor Olli Lehto at his 80th anniversary.

The Organizing Committee